

Appl. No. 10/086,478
Reply Filed: August 9, 2005
Reply to Office Action mailed February 9, 2005

REMARKS

In response to the Office Action mailed February 9, 2005, the Applicant submits this Reply. In view of the foregoing amendments and following remarks, reconsideration is requested.

In the foregoing amendments, claims 11, 29-32, 34 and 35 have been amended. Claim 11 has been amended so as to make it not identical with claim 10. Claims 1-38 remain in this application, of which claims 1, 22-29, and 34-38 are independent. No fee is due for claims for this amendment.

In the Office Action, claims 1-38 were rejected.

Rejection Under 35 U.S.C. §112

Claims 1-28, 30-32 and 36-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention, because the term "neighborhood" was deemed to be relative. The rejection is respectfully traversed.

As noted in the Office Action, the "neighborhood" is a "specified number of video samples from points in time surrounding the input time. The number of video samples so specified *depends on the resampling function that is used to compute the output video sample.*" Specification, page 11, lines 24-27, emphasis added. As this section of the specification further states: "A video resampling function generates an output video sample from a plurality of input video samples at different points in time by combining information from the plurality of input video samples." In other words, the neighborhood is defined by the number of input samples used by the video resampling function. The term "neighborhood," therefore, is not a relative term because the specification clearly provides a standard for ascertaining its scope. Accordingly, this rejection is traversed.

Rejection Under 35 U.S.C. §102

Claims 1-2, 12, 14, 22-23, 25-32, and 34-38, of which claims 1, 22-23 and 25-29 are independent, were rejected under 35 U.S.C. §102(b) in view of U.S. Patent 5,642,171 ("Baumgartner"). The rejection is respectfully traversed.

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According to Baumgartner, video and audio data are played back synchronized. The synchronization method involves several steps. First, "there [must] be a common starting point for the audio and video data. Col. 13, lines 49-50. It is then "determin[ed] what video frame number is currently being played." Col. 6, line 47-48 and Col. 13, lines 25-27. It also "determines the current audio position, i.e., which audio byte is currently being played." Col. 6, lines 48-49 and Col. 13, lines 29-30. Then it "calculates the equivalent audio frame number being played using [an] audio frame rate value." Col. 13, lines 36-38 and Col. 6, line 50. "The synchronization method compares the video and audio frame positions and computes a synchronization error value." Col. 6, lines 50-52. "The synchronization error value is used to assign a tempo value . . . [which is used to adjust] the video tempo [or] the audio tempo." Col. 6, lines 56-60. In essence, the method of Baumgartner slows down or speeds up either the video frame rate or the audio frame rate as desired to maintain synchronization. See Col. 14, lines 35-40

In contrast, independent claim 1 recites "computing an output audio sample at the output time based on at least the audio data in the neighborhood of the corresponding input time using a resampling function," and "computing an output video sample at the output time based on at least the video data in neighborhood of the corresponding input time using a resampling function." Baumgartner does not teach computing output audio or video samples using audio or video data and a resampling function. Baumgartner merely teaches adjusted the video or audio frame rates. As noted in the specification, a resampling function generates an output sample from a plurality of input samples at different points in time by combining information from these input samples. See page 11, last two paragraphs and page 12, first two paragraphs. The adjustment of frame rates in Baumgartner has nothing to do with a resampling function. Accordingly, the rejection of claim 1 is traversed.

Independent claims 22-23, 25-28 and 36-38 also recite such a resampling function. Accordingly, the rejection of these claims in view of Baumgartner also is traversed for the same reason.

Regarding claims 29 and 34-35, these claims have been amended to provide antecedent basis for the term "retiming function" by reciting a resampling function that generates each output sample from a plurality of samples. Accordingly, these claims now have limitations

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similar to those found in the other independent claims and should be allowable for at least the same reasons.

Rejections Under 35 U.S.C. §103

Claims 13, 24 and 33, of which claim 24 is independent, were rejected under 35 U.S.C. §103(a) as being unpatentable over Baumgartner in view of U.S. Patent 6,188,396 ("Boezeman").

Baumgartner was discussed above.

Regarding independent claim 24, the Office Action states that Baumgartner fails to teach "an editing interface allowing a user to associate a definition of a retiming function for a rampable retiming effect . . ." Office Action, page 18, last 3 lines. However, Boezeman, Fig. 12 and Col. 2, lines 41-61 is relied upon to teach this feature. The Office Action asserts that one of ordinary skill in the art would have combined these features to allow "a user to specify the audio and video clips being specified." Office Action, page 19, lines 7-8.

With respect to independent claim 24, Baumgartner also fails to teach both "an output audio sample is computed using a resampling function based on at least the audio data in a neighborhood of a corresponding input time according to the retiming function," and "an output video sample is computed using a resampling function based on at least the video data in a neighborhood of a corresponding input time according to the retiming function," for the same reasons noted above in connection with claim 1. Boezeman also fails to teach this limitation. Accordingly, the rejection of independent claim 24 is traversed.

Claims 13 and 33 are dependent claims that are allowable for at least the same reasons as the independent claims from which they depend (namely, claims 1 and 29 respectively).

The remaining rejections under 35 U.S.C. §103(a) relate to dependent claims. In particular:

Claims 3, 5-6, and 8 were rejected under 35 U.S.C. §103(a) as being unpatentable over Baumgartner and in view of Levine et al., "A Sines+Transients+Noise Audio Representation for Data Compression and Time/Pitch Scale Modification", 1998 ("Levine").

Claims 4 and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Baumgartner and Levine further in view of U.S. Patent 6,665,450 ("Cornog").

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Claims 9, 15 and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Baumgartner in view of Computer Vision, by Linda Shapiro et al. ("Shapiro").

Claims 10-11 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Baumgartner and Shapiro, further in view of U.S. Patent Application 2002/0143547 ("Fay").

Claims 18-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Baumgartner and Shapiro, further in view of Boezeman.

These rejections are respectfully traversed. These claims are dependent claims that are allowable for at least the same reasons as the independent claims, for the reasons discussed above.

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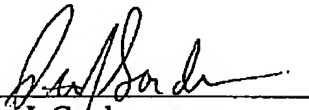
CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this reply, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, please charge any fee to **Deposit Account No. 50-0876**.

Respectfully submitted,

Avid Technology, Inc.

By 
Peter J. Gordon
Registration No. 35,164
Avid Technology, Inc.
One Park West
Tewksbury, MA 01876
Tel.: (978) 640-6789